

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 57-111957  
(43)Date of publication of application : 12.07.1982

---

(51)Int. Cl.

H01M 4/86

---

(21)Application number : 55-185127 (71)Applicant : TOSHIBA CORP  
(22)Date of filing : 27.12.1980 (72)Inventor : SUZUKI NOBUKAZU

---

(54) AIR ELECTRODE

(57)Abstract:

PURPOSE: To prevent any liquid leakage of a battery which is prepared by using an air electrode, and enable heavy-load discharge of the battery by preparing the air electrode by making an oxygen-gas permselective film to be in contact with an air electrode body, with a water repellent layer of a given thickness interposed between the electrode body and the oxygen-gas permselective film.

CONSTITUTION: A water repellent layer, which has a thickness of 0.1~1 $\mu$ m and is made of fluoroethylene propylene (copolymer) or the like having electrolyte resisting and water repellent property, is formed on a surface of an oxygen-gas permselective film such as polysiloxane by a sputtering or a vapor deposition method. The oxygen-gas permselective film is pressed upon and is made in contact with an electrode body made of a porous active metal such as a silver filter, with the water repellent layer interposed between the electrode body and the oxygen-gas permselective film. After that, they are made to adhere to each other by thermal fusion or the like, thus an air electrode is prepared. Thus prepared air electrode is used for a hydrogen/oxygen fuel cell, a metal/air battery or the like.

---

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998, 2003 Japan Patent Office